



AMENDMENTS TO THE CLAIMS:

1. (Currently Amended) Seed of corn inbred line designated BE9514, representative seed of said line having been deposited under ATCC Accession No. PTA[ ]-5644.

2. (Original) A corn plant, or a part thereof, produced by growing the seed of claim 1.

3. (Original) The corn plant of claim 2, wherein said plant has been detasseled.

4. (Original) A tissue culture of regenerable cells produced from the plant of claim 2.

5. (Original) Protoplasts produced from the tissue culture of claim 4.

6. (Original) The tissue culture of claim 4, wherein cells of the tissue culture are from a tissue selected from the group consisting of leaf, pollen, embryo, root, root tip, anther, silk, flower, kernel, earl cob, husk and stalk.

7. (Currently Amended) A corn plant regenerated from the tissue culture of claim 4, said plant having all the morphological and physiological characteristics on inbred line BE9514, representative seed of said line having been deposited under ATCC Accession No. PTA-[ ]5644.

8. (Original) A method for producing an F1 hybrid corn seed, comprising crossing the plant of claim 2 with a different corn plant and harvesting the resultant F1 hybrid corn seed.

9. (Cancelled) A hybrid corn seed produced by the method of claim 8.

10. (Cancelled) A hybrid corn plant, or parts thereof, produced by growing said hybrid of claim 9.

11. (Original) A method for producing a male sterile corn plant comprising transforming the corn plant of claim 2 with a nucleic acid molecule that confers male sterility.

12. (Original) A male sterile corn plant produced by the method of claim 11.
13. (Original) A method of producing an herbicide resistant corn plant comprising transforming the corn plant of claim 2 with a transgene that confers herbicide resistance.
14. (Original) An herbicide resistant corn plant produced by the method of claim 13.
15. (Original) The corn plant of claim 14, wherein the transgene confers resistance to an herbicide selected from the group consisting of: imidazolinone, sulfonyleurea, glyphosate, L-phosphinothricin, triazine and benzonitrile.
16. (Original) A method of producing an insect resistant corn plant comprising transforming the corn plant of claim 2 with a transgene that confers insect resistance.
17. (Original) An insect resistant corn plant produced by the method of claim 16.
18. (Original) The corn plant of claim 17, wherein the transgene encodes a *Bacillus thuringiensis* endotoxin.
19. (Original) A method of producing a disease resistant corn plant comprising transforming the corn plant of claim 2 with a transgene that confers disease resistance.
20. (Original) A disease resistant corn plant produced by the method of claim 19.
21. (Original) A method of producing a corn plant with decreased phytate content comprising transforming the corn plant of claim 2 with a transgene encoding phytase.
22. (Original) A corn plant with decreased phytate content produced by the method of claim 21.

23. (Original) A method of producing a corn plant with modified fatty acid metabolism or modified carbohydrate metabolism comprising transforming the corn plant of claim 2 with a transgene encoding protein selected from the group consisting of stearyl-ACP desaturase, fructosyltransferase, levansucrase, alpha-amylase, invertase and starch branching enzyme.

24. (Original) A corn plant produced by the method of claim 23.

25. (Original) The corn plant of claim 24 wherein the transgene confers a trait selected from the group consisting of waxy starch and increased amylase starch.

26. (Currently Amended) A corn plant, or part thereof, having all the physiological and morphological characteristics of the inbred line BE9514, representative seed of said line having been deposited under ATCC Accession No. PTA-[ ]5644.

27. (Currently Amended) A method of introducing a desired trait into corn inbred line BE9514 comprising:

- (a) crossing BE9514 plants grown from BE9514 seed, representative seed of which has been deposited under ATCC Accession No. PTA-[ ]5644, with plants of another corn line that comprise a desired trait to produce F1 progeny plants, wherein the desired trait is selected from the group consisting of male sterility, herbicide resistance, insect resistance, disease resistance and waxy starch;
- (b) selecting F1 progeny plants that have the desired trait to product selected F1 progeny plants;
- (c) crossing the selected progeny plants with the BE9514 plants to produce backcross progeny plants;
- (d) selecting for backcross progeny plants that have the desired trait and physiological and morphological characteristics of corn inbred

line BE9514 listed in Table 1 to produce selected backcross progeny plants; and

- (e) repeating steps (c) and (d) three or more times in succession to produce selected fourth or higher backcross progeny plants that comprise the desired trait and all of the physiological and morphological characteristics of corn inbred line BE9514 listed in Table 1 as determined at the 5% significance level when grown in the same environmental conditions.

28. (Original) A plant produced by the method of claim 27, wherein the plant has the desired trait and all of the physiological and morphological characteristics of corn inbred line BE9514 listed in Table 1 as determined at the 5% significance level when grown in the same environmental conditions.

29. (Original) The plant of claim 28 wherein the desired trait is herbicide resistance and the resistance is conferred to an herbicide selected from the group consisting of: imidazolinone, sulfonylurea, glyphosate, glufosinate, L-phosphinothricin, triazine and benzonitrile.

30. (Original) The plant of claim 28 wherein the desired trait is insect resistance and the insect resistance is conferred by a transgene encoding a *Bacillus thuringiensis* endotoxin.

31. (Original) The plant of claim 28 wherein the desired trait is male sterility and the trait is conferred by a cytoplasmic nucleic acid molecule that confers male sterility.

32. (Currently Amended) A method of modifying fatty acid metabolism, modified phytic acid metabolism or modified carbohydrate metabolism into corn inbred line BE9514 comprising:

- (a) crossing BE9514 plants grown from BE9514 seed, representative seed of which has been deposited under ATCC Accession No. PTA-[ ]5644, with plants of another corn line that

comprise a nucleic acid molecule encoding an enzyme selected for the group consisting of phytase, stearyl-ACP desaturase, fructosyltransferase, levansucrase, alpha-amylase, invertase and starch branching enzyme;

- (b) selecting F1 progeny plants that have said nucleic acid molecule to produce selected F1 progeny plants;
- (c) crossing the selected progeny plants with the BE9514 plants to produce backcross progeny plants;
- (d) selecting for backcross progeny plants that have said nucleic acid molecule and physiological and morphological characteristics of corn inbred line BE9514 listed in Table 1 to produce selected backcross progeny plants; and
- (e) repeating steps (c) and (d) three or more times in succession to produce selected fourth or higher backcross progeny plants that comprise said nucleic acid molecule and have all of the physiological and morphological characteristics of corn inbred line BE9514 listed in Table 1 as determined at the 5% significance level when grown in the same environmental conditions.

33. (Original) A plant produced by the method of claim 32, wherein the plant comprises the nucleic acid molecule and has all of the physiological and morphological characteristics of corn inbred line BE9514 listed in Table 1 as determined at the 5% significance level when grown in the same environmental conditions.

34. (New) A method for producing a double-cross hybrid corn seed, comprising the steps of:

- a) crossing the inbred corn plant of claim 2 with a second inbred corn plant;
- b) harvesting resultant hybrid corn seed obtained from the cross in step a);

- c) crossing a third inbred corn plant with a fourth inbred corn plant;
- d) harvesting resultant hybrid corn seed obtained from the cross in step c);
- e) crossing corn plants grown from the harvested resultant hybrid corn seed obtained in step b) and corn plants grown from the harvested resultant hybrid seed obtained in step d); and,
- f) harvesting resultant double-cross hybrid seed.

35. (New) A method for producing a BE9514-derived corn plant, comprising:

- a) crossing inbred corn line BE9514, representative seed of said line having been deposited under ATCC accession number PTA-5644, with a second corn plant to yield progeny corn seed;
- b) growing said progeny corn seed, under plant growth conditions, to yield said BE9514-derived corn plant.

36. (New) The method of claim 35, further comprising:

- c) crossing said BE9514-derived corn plant with itself or another corn plant to yield additional BE9514-derived progeny corn seed;
- d) growing said progeny corn seed of step c) under plant growth conditions, to yield additional BE9514-derived corn plants; and
- e) repeating the crossing and growing steps of (c) and (d) from 0 to 7 times to generate further BE9514-derived corn plants.

37. (New) The method for producing a BE9514-derived corn plant of claim 35, wherein the second corn plant is from a different species than inbred corn line BE9514, and wherein the second corn plant is a member of the Gramineae family.

38. (New) The method for producing a BE9514-derived corn plant of claim 35, wherein the second corn plant is from a different species than inbred corn line BE9514, and wherein the second corn plant is a member of a genera

selected from the group consisting of *Zea*, *Tripsacum*, *Croix*, *Schlerachne*, *Polytoca*, *Chlonachne* of the tribe Maydeae.

39. (New) The method for producing a BE9514-derived corn plant of claim 19, wherein the second corn plant is from a different species than inbred corn line BE9514, and wherein the second corn plant is a variety of grain sorghum.